

REMARKS

**35 U.S.C. 103(a) rejection**

The applicants would like to extend their thanks for meeting with the applicants' representative to discuss the merits of the application during the interview of 29 May 2003 and for his helpful comments. Unfortunately, at this time, the declarations requested by the examiner are unavailable for submission. As such, it is hoped that reconsideration of the arguments presented during the interview are given a reconsideration.

Claims 4-8 were rejected by the examiner as being obvious over Allard et al. (U.S. 5,616,331). The key assumption to the examiner's rejections is that Allard et al. teaches the use of a microemulsion.

However, this assumption is incorrect. It appears that the basis for this assumption is the overlap of ranges of particle sizes for the "ultrafine O/W emulsion" of Allard et al. (lower limit can be 100 nm) and for that of microemulsions (upper limit of 100 nm)<sup>1</sup>. However, as can be seen from the attached chart, this is but one property which characterizes the differences between emulsions and microemulsions.

There is no evidence that the ultrafine O/W emulsions of Allard et al. possesses these additional properties. The examiner's comments about Allard et al.'s teaching with respect to transparency are objected to by the applicants because they are directed toward a component of their emulsion (i.e. the nanopigments) not the entire emulsion. Moreover, even for this teaching, Allard et al. does not teach transparency but being *translucent to the skin*; this is not the same as being transparent (e.g. a colored solution when spread across the skin could be considered to be translucent to the skin, but would not be considered transparent to one of ordinary skill in the art).

There is also no evidence that Allard et al. intended to act as his own lexicographer and use a term that was repugnant to its normal meaning (i.e. evidence provided by Allard et al.'s teachings are consistent with the normal interpretation of the term "emulsions" - e.g. particle size from col. 6, lines 14-15 are consistent with the particle size from the attached chart and there is no evidence that the emulsions of

<sup>1</sup> - see table comparing emulsions and microemulsions (page 19 from ACS Short Course - "Surfactants, Micelles, Liposomes and Liquid Crystals in Emulsions and Micro Emulsions") which is attached to this office action.

Allard et al. did not have the other properties normally associated with emulsions.). For Allard et al. to use a term which is meant to be inclusive of being both an emulsion and a microemulsion would've been repugnant to its normal meaning even if there had been a more detailed explanation as to how the term "ultrafine, O/W emulsion" was given (which Allard et al. has not).

Lastly, even if were construed that Allard et al. has some characteristics which are "close" to the applicants' claimed invention, it is well known that "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)." - see also MPEP 2143.01. For the present reference, there is no evidence which supports the position that one of ordinary skill in the art would have been motivated or directed to modify the parameters of Allard et al.'s emulsions to create a wholly different form of composition, i.e. a microemulsion.

For these reasons, it is believed that the applicants' claims are not rendered obvious by the Allard et al. reference.

**Closing**

Applicants also believe that this application is in condition for allowance. However, should any issue(s) of a minor nature remain, the Examiner is respectfully requested to telephone the undersigned at telephone number (212) 808-0700 so that the issue(s) might be promptly resolved.

Respectfully submitted,

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Attachments: page 19 from ACS Short Course - "Surfactants, Micelles, Liposomes and Liquid Crystals in Emulsions and Micro Emulsions", prepared by Prof. Yuzhou Li and Stig E. Friberg, presented on 6-10 May 2002 (Clarkson University, Potsdam, NY).

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**CERTIFICATE OF FACSIMILE TRANSMISSION**

I hereby certify that the foregoing Amendment under 37 CFR § 1.111 is being facsimile transmitted to the United States Patent and Trademark Office on the date indicated below:

Date: 4 August 2003

By: Julie Harting

Julie Harting

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# Surfactants, Micelles, Liposomes, and Liquid Crystals in Emulsions and Microemulsions

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# ACS Short Course

**Surfactants, Micelles, Liposomes  
and Liquid Crystals in Emulsions  
and Micro Emulsions**

**May 6th to May 10th**

**2002**

**At  
Clarkson University  
Potsdam, NY 13699**



Emulsions		Microemulsions	
Appearance	Turbid	Transparent	(Blueish, Grayish)
Droplet Size	0.1-100µm	5-100nm	
Thermodynamic Stability	Unstable	Stable	
Formation	Energy Required	Spontaneous	